Patent Claims

1. A granulated material for 3D binder printing, which is composed of particles provided with a surface layer (2), characterized in that the surface layer (2) consists of a polyvinyl butyral and has a nonpolar outer surface, the granulated material substrate being polar if the polyvinyl butyral includes both polar and nonpolar groups.

2. The granulated material as claimed in claim 1, characterized in that the thickness of the surface layer approximately corresponds to a monolayer of the monomers.

3. The granulated material as claimed in claim 1, characterized in that the thickness of the surface layer amounts to approximately 0.1 to 10% of the mean radius of the particles.

4. A process for producing a granulated material for 3D binder printing, characterized in that a surface layer (2) of a polyvinyl butyral is applied to starting particles (1), polar starting particles (1) being used if the polyvinyl butyral includes both polar and nonpolar groups.

5. The process as claimed in claim 4, characterized in that the starting particles (1) are brought into contact with a solution which contains the material of the surface layer (2) in dissolved form and are dried by evaporation of the solvent.

6. A 3D binder printing process for producing an object from a granulated material which comprises particles provided with a surface layer (2), comprising the steps of:

- placing a layer of the granulated material onto a base,
- wetting predetermined regions (3) of the layer with a binder liquid,
- repeating these steps until the object has been formed,

the binder liquid being selected from among liquids in which the surface layer (2) of the particles of the granulated material is soluble, characterized in that a granulated material with a nonpolar surface is used.

7. The 3D binder printing process as claimed in claim 6, characterized in that the granulated material as claimed in one of claims 1 to 3 is used.

8. The 3D binder printing process as claimed in claim 6 or 7, characterized in that the viscosity of the binder liquid is selected to be adjustable, in particular by the addition of higher alcohols.

9. An object formed from particles of granulated material joined to one another, characterized in that it is obtained from the granulated material as claimed in one of claims 1 to 3 or using the process as claimed in one of claims 6 to 8.